

*Serial No. 10/578,871***REMARKS**

The amendment introducing “pitch” are supported in the specification at page 14, line 22 to page 15, line 18.

(1-2) § 112, second paragraph. All claims are rejected under § 112, second paragraph for a phrase in claims 1 and 4, namely, “detecting whether a key is already depressed at a time when a played key different from the depressed key is played.” This rejection is traversed for the record, and withdrawal is requested.

The Examiner states that he has examined the claims as if they read, “detecting whether a first key is already depressed at a time when a played key different from the first key is played” and claims 1 and 4 read “detecting whether the depressed key is already depressed at a time when the played key different from the depressed key is played, wherein the played key is played when not all remaining keys are already depressed.” The word “first” is redundant because the claim describes which key is played first by way of “already.”

As to method claim 11, the Examiner requires the steps to be in order so that the depressed key is depressed before the played key is played. This is respectfully traversed on the basis of PTO practice, which ordinarily denies that a performance order of steps corresponds to the recitation order of steps. The Applicant is unaware of any basis (such as the MPEP) for the Examiner’s requirement. If the rejection is to be maintained, citation is requested.

(3-4) § 102. Claims 1, 4, and 9-15 are rejected under § 102(b) over a new reference, Haruyama, US 6,118,065. This rejection is respectfully traversed.

Pitch. The Examiner applies col. 26, lines 61-65, for disclosing “a specific relation (time difference) between played keys and depressed keys.” The claims are now amended to recite a specific relation of pitch, which overcomes the reference’s disclosure as asserted.

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The applied text relates to Fig. 15A, which is a graph of time (the Examiner is invited to note the horizontal “t” arrow in the middle of the figure). In col. 10 at lines 1 to 8, Haruyama describes that the key depression detecting circuit 2D outputs a key-on event signal upon detection of each newly depressed key and a key-off event signal upon detection of each newly released key, and that the key depression detecting circuit 2D also generates velocity data. There is also a description about Fig. 15A in col. 26 at lines 61 to 65 of Haruyama. According to Fig. 15A, the key-on event KON and the key-off event KOF of note name C3 are set as the automatic data. Also in Fig. 15A, the player depresses note name C3 and note name B3 at the timing indicated by KON, and then releases note name D3 and note name B3 at the timing indicated by KOF. In this case, in Fig. 15A, it is explained how the automatic data (note name C3) is outputted.

Thus, according to Fig. 15A, a tone of key of note name C3 is generated at the timing of depressing a key of note name D3, and a tone of note name C3 is generated during “SOUND AT C3” of Fig. 15A. The tone of key of note name C3 is deadened at the time of depressing a key of note name B3, then, the tone of key of note name C3 is reproduced, and the tone of key of note name C3 is deadened at the timing of releasing the key of note name B3.

Haruyama does not disclose anything about detecting a predetermined relationship between a *pitch* of a played key and a *pitch* of a depressed key, or generating a tone based on such a relationship. Fig. 15A does not show detecting a relationship between pitches of keys, but only detection of difference between a *timing* of depressing note name C3 and a timing of depressing note name B3.

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Resonance. Unlike the Applicant, Haruyama is not at all concerned with resonance. In fact, the word “resonance” does not occur anywhere in Haruyama, and neither do related words starting with “resona—.” The words “harmony,” “timbre,” and “tone quality” also fail to appear in this patent.

The Examiner also asserts that col. 2, lines 4-12 disclose a resonance, but this is, with respect, incorrect—that passage deals only with timing.

Regarding col. 2, lines 27 to 30 of Haruyama (cited by the Examiner on page 4 of the Action), it merely describes that manual performance data is generated by the player’s performance.

Played Key, Depressed Key. The Examiner also relies on col. 26, lines 61-65, which read, “In the event that the keys are depressed in succession at an interval, or with a time difference, greater than the length of a thirty-second note as shown in FIG. 15A, the currently generated tone is temporarily deadened and regenerated at a time point corresponding to next key depression.” This passage, again, relates only to the *timing*. It does not at all disclose the Applicant’s claimed features of “detecting a specific relation between a pitch of the played key and a pitch of the already depressed key; and ... generating a predetermined musical sound based on the specific relation.”

Automatic Performance. Haruyama is concerned only with an electronic musical instrument that performs based on audio data which is previously stored, without a player actually playing the keys (“automatic performance.” col. 1, line 6, etc.), and also to method of “pretended manual performance” (col. 1, line 13). Anything to do with resonance and pitch is not predictable from Haruyama, because Haruyama does not recognize even the possibility of an invention related to those things.

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(5-6) § 102. Claims 2-3, 5, and 6 are rejected over a Haruyama in view of Matsuda et al., US 6,316,711. This rejection is respectfully traversed.

Matsuda merely discloses a description about changing a volume of a left and right musical sound signal in corresponding to position of a depressed key, and does not disclose anything about the resonance.

Withdrawal of the rejections is requested.

Respectfully submitted,

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